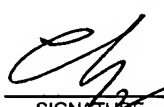


<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER CDM/2353 0010 U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/507387</b>
INTERNATIONAL APPLICATION NO. PCT/CA03/00330	INTERNATIONAL FILING DATE 11 March 2003	PRIORITY DATE CLAIMED 11 March 2002
TITLE OF INVENTION DNA AND RNA CONFORMATIONAL SWITCHES AS SENSITIVE ELECTRONIC SENSORS OF ANALYTES		
APPLICANT(S) FOR DO/EO/US Simon Fraser University		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. <input checked="" type="checkbox"/> The US has been elected (Article 31). 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> has been communicated by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). a. <input type="checkbox"/> is attached hereto. b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). 7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau). b. <input type="checkbox"/> have been communicated by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). <b>Items 11 to 20 below concern document(s) or information included:</b> 11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input checked="" type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input type="checkbox"/> A preliminary amendment. 14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76. 15. <input type="checkbox"/> A substitute specification. 16. <input checked="" type="checkbox"/> A power of attorney and/or change of address letter. 17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825. 18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4). 20. <input checked="" type="checkbox"/> Other items or information: <b>PCT Int'l Search Report; Certificate Under 37 CFR 83.73(b); PCT Request; PCT Notification of Recording of Change;</b>		

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

15 sheets of drawings (FIGS. 1-15);<sup>2</sup> Check in the sum of \$644;  
Certificate of Mailing by "Express Mail" EV422219244US

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/507387</b>		INTERNATIONAL APPLICATION NO. <b>PCT/CA03/00330</b>		ATTORNEY'S DOCKET NUMBER <b>CDM/2353.0010</b>	
21. <input checked="" type="checkbox"/> The following fees are submitted: <b>BASIC NATIONAL FEE (CFR 1.492(a)(1)-(5)):</b> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO.....\$1080.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO .....\$920.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO ..... \$770.00 International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) .....\$730.00 International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) .....\$100.00 <b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>				CALCULATIONS      PTO USE ONLY	
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
Total claims	36 - 20 =	16	X \$18.00	\$ 288.00	
Independent claims	2 - 3 =	0	X \$86.00	\$ 0	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$290.00	\$	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$ 1,208.00</b>	
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$ 604.00	
<b>SUBTOTAL =</b>				<b>\$ 604.00</b>	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	
<b>TOTAL NATIONAL FEE =</b>				<b>\$ 604.00</b>	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$ 40.00	
<b>TOTAL FEES ENCLOSED =</b>				<b>\$ 644.00</b>	
				Amount to be refunded: \$	
				Amount to be charged: \$	
a. <input checked="" type="checkbox"/> A check in the amount of \$ <b>644.00</b> to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <b>03-1550</b> . A duplicate copy of this sheet is enclosed. d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.					
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.					
SEND ALL CORRESPONDENCE TO:					
<b>CHERNOFF, VILHAUER, McCLUNG &amp; STENZEL LLP</b> Attorneys at Law 1600 ODS Tower 601 S.W. Second Avenue Portland, Oregon 97204-3157			 SIGNATURE <b>Charles D. McClung</b> NAME <b>26,568</b> REGISTRATION NUMBER		

10/507387

CERTIFICATE OF MAILING

DI09 Rec'd PCT/P10 10 SEP 2004

BY "EXPRESS MAIL"


Express Mail No.: EV 422219244 US

Date of Deposit: September 10, 2004

Title: DNA AND RNA CONFORMATIONAL SWITCHES AS SENSITIVE ELECTRONIC  
SENSORS OF ANALYTES

Applicant: Simon Fraser University

I hereby certify that a U.S. National Phase Entry Under PCT Chapter II International Utility Patent Application, including Specification (40 pages), with: (1) Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) Concerning a Submission Under 35 U.S.C. 371 (in duplicate); (2) PCT Request; (3) PCT Power of Attorney; (4) PCT Notification of the Recording of a Change; (5) PCT International Search Report; (6) Recordation Form Cover Sheet, together with Assignment; (7) Certificate Under 37 CFR §3.73(b), together with a copy of Power of Attorney and Assignment; (8) 15 sheets of drawings (FIGs. 1-15(b)); (9) Check in the amount of \$644 for the filing and recordation fees; and (10) acknowledgment postcard, are being deposited with the United States Postal Service "Express Mail to Addressee" on the date indicated above and is addressed to: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
Linda M. Armstead

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE UNDER 37 CFR §3.73(b)

Applicant : Sen, Dipankar  
App. No. : \_\_\_\_\_  
Filed : Concurrently Herewith  
Title : DNA AND RNA CONFORMATIONAL SWITCHES AS SENSITIVE ELECTRONIC  
SENSORS OF ANALYTES  
(Assignee) : Simon Fraser University, a university  
(Type of Assignee, e.g., corporation, partnership,  
university, government agency, etc.)

certifies that it is the assignee of the entire right, title and interest  
in the patent application identified above by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application  
identified above.

OR

B. ☐ A chain of title from the inventor(s), of the patent  
application identified above, to the current assignee as shown  
below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy is attached.

2. From: \_\_\_\_\_ To: \_\_\_\_\_

The document was recorded in the Patent and Trademark Office at  
Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy is attached.

☐ Additional documents in the chain of title are listed on a  
supplemental sheet.

☒ Copies of assignments or other documents in the chain of title  
are attached. (Where one or more of the documents is  
unrecorded.)

The undersigned has reviewed all the documents in the chain of title  
of the patent application identified above and, to the best of  
undersigned's knowledge and belief, title is in the assignee identified  
above.

The undersigned (whose title is supplied below) is empowered to sign  
this Certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own knowledge  
are true, and that all statements made on information and belief are  
believed to be true; and further, that these statements are made with the  
knowledge that willful false statements, and the like so made, are  
punishable by fine or imprisonment, or both, under Section 1001, Title 18  
of the United States Code, and that such willful false statements may  
jeopardize the validity of the application or any patent issuing thereon.

Date : September 10, 2004  
Name : Charles D. McClung  
Title : Attorney for the Assignee (copy of Power of Attorney attached)

Signature: 

Chernoff, Vilhauer, McClung & Stenzel, LLP  
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601 S.W. Second Avenue  
Portland, Oregon 97204-3157  
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